

Table 2.8-2. Summary of Environmental Impacts, Landusky Mine Reclamation

| Affected Resource or Mine Feature | Existing Condition (February 2001) | <i>Alternative L1</i> , Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | <i>Alternative L2</i> , Optimize Earthwork within Bond Amount | <i>Alternative L3</i> , Improved Pit Drainage Drill Hole | <i>Alternative L4</i> , Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | <i>Alternative L5</i> , Pit Backfill to Cover Sulfide Highwalls | <i>Alternative L6</i> , Pit Backfill to Restore Pre-mine Topography |
|--|---|---|---|--|---|---|---|
| Geotechnical Conditions (stability, erodibility, & maintainability) | | | | | | | |
| <i>Lower Leach Pads L79, L80/81/82, L83, L84:</i> | | | | | | | |
| Dikes | Somewhat good. Interim reclamation has improved stability. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| Heaps | Somewhat good. Interim reclamation has improved stability from somewhat poor. | Somewhat good but more difficulty maintaining barrier covers. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| Liners | Intermediate durability. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| <i>L85/86 Leach Pad:</i> | | | | | | | |
| Dikes | Intermediate stability. | Improve stability to somewhat good with buildout to 2.5H:1V slopes. | Same as Alt. L1. | Same as Alt. L1. | Stability improved to good with removal of dike. | Same as Alt. L4. | Same as Alt. L4. |
| Heaps | Interim reclamation improve stability from somewhat poor to intermediate. | Intermediate with GCL in reclamation cover. | Somewhat good with no GCL. | Same as Alt. L2. | Heap stability improved to good with removal and placement as backfill. | Same as Alt. L4. | Same as Alt. L4. |
| Liners | Intermediate functioning. | Same as existing condition. | Same as existing condition. | Same as existing condition. | Removal of liner improves function to good. | Same as Alt. L4. | Same as Alt. L4. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|--|---|---|---|--|---|---|--|
| <i>L87/91 Leach Pad:</i> | | | | | | | |
| Dikes | Intermediate stability. | Somewhat good with built out L91 dike. | Same as existing conditions. | Same as existing conditions. | Same as existing conditions. | Somewhat good due to slight reduction in load behind dikes and additional revegetation. | Somewhat good due to reduction in load behind dikes and additional revegetation. |
| Heaps | Intermediate stability due to some regrading. | Stability improved to somewhat good with 3H:1V slopes. | Intermediate stability with regrade to 2.5H:1V slopes. | Same as Alt. L2. | Same as Alt. L2. | Stability improved to good with some heap material removed. | Similar to Alt. L5. |
| Liners | Intermediate, functioning. | Same as existing condition. | Same as existing condition. | Same as existing condition. | Same as existing condition. | Same as existing condition. | Same as existing condition. |
| <i>Waste Rock Dumps:</i> | | | | | | | |
| August #1 and #2 Waste Rock Dumps | Somewhat good as dumps are reclaimed or graded. | Somewhat good. Partial removal but reclaimed on steep slopes. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Good stability with use as backfill. |
| Montana Gulch Waste Rock Dump | Intermediate condition with top disturbed. | Somewhat good condition with partial removal and top reclaimed. | Intermediate with top reclaimed. | Same as Alt. L2. | Same as Alt. L2. | Same as Alt. L2. | Same as Alt. L2. |
| Mill Gulch Waste Rock Dump | Somewhat good condition. | Somewhat good condition with added revegetation. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. |
| Gold Bug Repository | Existing condition is intermediate. | Intermediate with grading and covering of dump top. | Somewhat good with grading and covering of dump top. | Same as Alt. L2. | Same as Alt. L2. | Good with dump removed. | Good with dump buried in pit backfill. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|--|--|--|--|---|---|--|---|
| <i>Open Pits:</i> | | | | | | | |
| Queen Rose Pit | Somewhat poor stability conditions. | Somewhat poor with grading limited to the pit floor. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Somewhat good due to backfilling. | Good due to large amount backfilling. |
| August/Little Ben Pit | Somewhat poor stability conditions. | Somewhat poor with grading limited to the pit floor. | Same as existing conditions. | Somewhat poor with limited highwall backfilling. | Intermediate with more backfilling on pit floor and walls. | Somewhat good due to backfilling. | Good due to large amount backfilling. |
| Gold Bug Pit | Somewhat poor stability conditions. | Intermediate with grading limited to pit floor and highwall reduction to cover sulfides. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Somewhat good due to backfilling. | Good due to large amount backfilling. |
| South Gold Bug Pit | Somewhat poor stability conditions. | Somewhat poor with grading limited to the pit floor. | Same as Alt. L1. | Same as Alt. L1. | Somewhat good due to highwall reduction. | Somewhat good due to backfilling. | Good due to large amount of backfilling. |
| Water Resources and Geochemistry | | | | | | | |
| <i>Infiltration of Precipitation:</i> | | | | | | | |
| Total Mine Ave. Infiltration (gpm) | 747 | 233 | 295 | 297 | 289 | 287 | 188 |
| % Reduction from Existing Infiltration | 0% | 69% | 61% | 61% | 61% | 62% | 75% |
| Total Pit Ave. Infiltration (gpm) | 194 | 73 | 95 | 96 | 89 | 84 | 34 |
| % Reduction from Existing Infiltration | 0% | 62% | 51% | 51% | 54% | 57% | 82% |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|--|---|--|---|---|--|---|---|
| <i>Sulfate Load Reductions (% from existing load):</i> | | | | | | | |
| King Creek | 0% | 2% | 2% | 2% | 3% | increases by 129% | increases by 227% |
| Swift Gulch | 0% | 39% | 36% | 36% | 36% | increases by 66% | increases by 119% |
| Montana Gulch | 0% | 52% | 22% | 22% | 22% | 20% | 28% |
| Mill Gulch | 0% | 45% | 2% | 2% | 2% | 3% | 31% |
| Sullivan Gulch | 0% | 12% | 0% | 0% | 0% | 0% | 0% |
| <i>Surface Water Quality:</i> | | | | | | | |
| Upper Swift Gulch | Intermediate impacts due to worsening shear zone water quality from unreclaimed pit area. | Moderately low impacts due to GCL covers over Queen Rose pit and pit benches. | Intermediate impacts due to water balance covers but no barrier covers. Pit sulfides still exposed. | Moderately low impacts due to thicker water balance covers on pit benches and NAG highwall cover. | Same as Alt. L3 | Intermediate impacts due to backfill of sulfide rock into Surprise and Queen Rose pits. | Moderately high impacts due to possible leaching of sulfide backfill and drainage to north. |
| King Creek | Intermediate impacts due to the presence of the August #2 waste rock dump. | Moderately low impacts with removal of the east lobe of the August 2 rock dump. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Contaminant load to King Creek increases due to pit backfill. | Moderately high impacts due to possible leaching of the pit backfill. |
| Sullivan Gulch | Intermediate impacts due to occasional ARD bypasses of capture system. | Intermediate impacts if acid generating materials are used to buildout the L91 dike. | Moderately low impacts with the added revegetation on the L91 dike. | Same as Alt. L2. | Same as Alt. L2. | Same as Alt. L2 | Same as Alt. L2. |
| Mill Gulch | Intermediate impacts due to occasional ARD bypasses of capture system.. | Moderately low impacts with the enhanced covers. | Same as Alt. L1 | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|--|---|--|---|--|---|--|--|
| Montana Gulch | Moderately high impacts due to presence of L85/86 leach pad and underdrains and existing highwalls. | Moderately high impacts due to excavation of the pit drainage notch exposing sulfides. | Intermediate impacts with reclamation of leach pad surface. | Same as Alt. L2, but directional borehole provides backup feature to help prevent formation of pit lake. | Low impacts due to L85/86 pad removal, restoration of natural drainage, and more coverage of pit highwalls. | Moderately low impacts due to L85/86 pad removal and creation of a free-draining pit. Sulfides placed in pit increases risk over L4. | Same as Alt. L5. |
| <i>Surface Water Quantity:</i> | | | | | | | |
| Upper Swift Gulch | Moderately high impacts to flow due to interception by mine pits and with WS-3 well open. | No change due to surface drainage routed to south. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Moderately low impacts with restored pit topography which restores runoff flows. |
| King Creek | Moderately high impacts to flow due to interception by mine pits. | No change due to surface drainage routed to south. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Low impacts due to restored pit topography which restores runoff flows. |
| Sullivan Gulch | Moderately high impacts to flow due to interception by leach pad. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| Mill Gulch | Moderately high impacts to flow due to interception by leach pad. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| Montana Gulch | Low impacts to flow with water treatment plant discharges. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | Moderately low impacts due to less capture for treatment. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | <i>Alternative L1</i> , Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | <i>Alternative L2</i> , Optimize Earthwork within Bond Amount | <i>Alternative L3</i> , Improved Pit Drainage Drill Hole | <i>Alternative L4</i> , Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | <i>Alternative L5</i> , Pit Backfill to Cover Sulfide Highwalls | <i>Alternative L6</i> , Pit Backfill to Restore Pre-mine Topography |
|-----------------------------------|--|---|--|--|--|---|---|
| <i>Groundwater Impacts:</i> | | | | | | | |
| Upper and Lower Swift Gulch | Intermediate impacts due to reduced recharge to seeps in Swift Gulch from interim reclamation liner on pit floor. | Moderately low impacts due to barrier cover over pit backfill. | Moderately low impacts due to sulfides in Surprise pit being covered with backfill, improved soil covers, and GCL pit floor liner. | Same as Alt. L2. | Same as Alt. L2. | Moderately high impacts with placement of sulfidic L87 spent ore backfill at head of drainage. | Moderately high impacts from large amount of L87/91 spent ore backfilled at head of drainage and more shallow seepage to north. |
| King Creek | Intermediate impacts due to August #2 waste rock dump and poor quality pit rim infiltration. | Moderately low impacts with removal of August #2 waste rock dump east lobe. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Contaminant loads to King Creek would increase due to pit backfill. | Moderately high impacts from acidic backfill at head of drainage and potential shallow seepage to creek. |
| Sullivan Gulch | Intermediate impacts due to occasional ARD bypasses of capture system. | Intermediate impacts if acid generating materials are used to buildout the L91 dike. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| Mill Gulch | Intermediate impacts on alluvial and bedrock aquifers due to occasional capture system bypasses. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. | No change from existing conditions. |
| Montana Gulch | Intermediate impacts from high infiltration to August and Gold Bug pit areas and some uncaptured groundwater flow. | Low impacts with extensive GCL cover use and free-draining pit. Sulfides in pit drainage notch may offset this benefit. | Moderately low impacts with reclamation covers over pits and other areas. | Same as Alt. L2. | Low impacts with removal of L85/86 leach pad from the drainage, improved covers and partial highwall coverage. | Intermediate impacts due to removal of the L85/86 leach pad offset by use of acid-forming backfill. | Same as Alt. L5. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|---|--|--|--|--|---|--|--|
| <i>Water Management:</i> | | | | | | | |
| Stability of Workings Used for Pit Drainage | Somewhat poor. Artesian well only. | Somewhat good with use of drainage notch. | Somewhat poor with soil cover over the pit floor. | Intermediate, with backup drainage borehole. | Intermediate, similar to Alt. L3. | Good. Most drainage via surface runoff. | Same as Alt. L5. |
| Stormwater Control Maintenance Requirements | Intermediate | Somewhat low | Somewhat low | Somewhat low | Somewhat low | Somewhat low | Intermediate. Backfilled slopes may be difficult to manage. |
| Seepage Collection (operating and maintenance difficulty) | Intermediate. System functioning adequately. | No change | No change | No change | No change | Difficulty increased to somewhat high with added capture system in pit area. | Same as Alt. L5. |
| Water Treatment Plant Operations (operating requirements and sludge disposal) | Somewhat high operating requirements. Somewhat easy sludge disposal. | Somewhat low operating requirements with less volume. Somewhat easy sludge disposal. | Intermediate operating requirements. Sludge disposal is somewhat easy. | Same as Alt. L2. | Same as Alt. L2. | Same as Alt. L1. | Same as Alt. L1. |
| Water Treatment Plant Acidity Load | High | Somewhat low | Somewhat high | Somewhat high | Somewhat high | High | High |
| LAD Water Quality and Quantity | High load and somewhat high volume. | High load and intermediate volume. | Same as Alt. L1. | Same as Alt. L1. | High load and somewhat low volume. | Same as Alt. L4. | High load and low volume. |
| Soil and Reclamation Materials | | | | | | | |
| Reclamation Cover Durability | Somewhat good. | Somewhat poor with use of GCL. | Somewhat good. | Somewhat good. | Somewhat good. | Somewhat good. | Somewhat poor due to synthetic. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|---|---|---|---|--|---|--|--|
| New Disturbances | Gold Bug highwall 3.6 acres. | Possible two new limestone quarries. 2 acres for Montana Gulch drainage. | No new disturbances. | 2 acres for Montana Gulch drainage. | Same as Alt. L2. | Same as Alt. L2. | Same as Alt. L2. |
| Vegetation and Revegetation | | | | | | | |
| Disturbance Area Revegetated | 40% | 81% | 78% | 78% | 81% | 85% | 92% |
| Revegetation Density, Diversity, and Sustainability | Somewhat poor density with intermediate diversity and sustainability. | Somewhat good density with intermediate diversity and sustainability. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Good density with somewhat high diversity and sustainability. | Same as Alt. L5. |
| Wildlife and Aquatics | | | | | | | |
| Reclamation Value as Wildlife Habitat | Intermediate | Somewhat high | Somewhat high | Somewhat high | Somewhat high | High | High |
| Land Use | | | | | | | |
| Long-Term Management Needs | High. Unreclaimed areas would need a lot of maintenance. | Somewhat high. Long term water treatment need indefinite. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. |
| Mineral Development Potential | Somewhat high. Not much backfill over deposit. | Intermediate | Intermediate | Intermediate | Intermediate | Somewhat low. Backfilling makes future mining unlikely. | Low. Extensive backfill make future mining unlikely. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|--|---|---|---|---|---|---|---|
| Recreation and Visual Resources | | | | | | | |
| General Aesthetic Condition of Reclaimed Mine | Somewhat low due to unreclaimed areas. | Somewhat low due to highwall areas. | Same as Alt. L1. | Same as Alt. L1. | Intermediate. | Somewhat high with more backfilling in pits. | High, backfilling eliminates pit highwalls. |
| Hunting, Tourism or other Recreational Suitability | Somewhat low. Area closed to public use. | Intermediate. Some use restrictions would still be needed. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Somewhat high. Minor use restrictions needed. | Somewhat high. Minimal use restrictions needed. |
| Cultural Resources | | | | | | | |
| Usability for Traditional Cultural Practices | Low. Existing disturbance not suitable. | Somewhat low due to remaining pit highwalls. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Intermediate with partial backfilling. | Somewhat high due to increased backfilling. |
| Social and Economic Conditions | | | | | | | |
| Study Area Economy | Year 2000 average employment of 31 jobs and \$622,000 in total industry output. | 35-48 jobs and \$1.3 million to \$1.6 million annually in total industry output over 4-year period (2001-2004). | 31-50 jobs and \$1.3 million to \$1.8 million annually in total industry output over 3-year period (2001-2003). | 30-50 jobs and \$1.3 million to \$1.8 million annually in total industry output over 3-year period (2001-2003). | 36-49 jobs and \$1.4 million to \$1.7 million annually in total industry output over 4-year period (2001-2004). | 35-48 jobs and \$1.3 million to \$1.7 million annually in total industry output over 5-year period (2001-2005). | 43-54 jobs and \$1.4 million to \$1.8 million annually in total industry output over 8-year period (2001-2008). |
| Landusky Community Infrastructure Condition | Somewhat high. Water supplies not impacted. | Same as existing conditions. |
| Health and Safety of Reclamation Workers | Somewhat high. | Intermediate. Cutting drainage notch is difficult. | Somewhat high. | Somewhat high. | Somewhat high. | Somewhat low. | Low due to extensive amount of work over time. |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | Alternative L1, Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | Alternative L2, Optimize Earthwork within Bond Amount | Alternative L3, Improved Pit Drainage Drill Hole | Alternative L4, Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | Alternative L5, Pit Backfill to Cover Sulfide Highwalls | Alternative L6, Pit Backfill to Restore Pre-mine Topography |
|---|---|--|--|---|---|--|---|
| Public Health and Safety Post-Reclamation | Intermediate. | Somewhat high. | Somewhat high. | Somewhat high. | Somewhat high. | High with elimination of pit highwalls. | Same as Alt. L5. |
| Long-Term Employment Value | Somewhat high if site to be maintained in existing condition. | Intermediate value with continued site maintenance and treatment needs. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. | Same as Alt. L1. |
| Total Reclamation Expenditures | \$10 million spent on interim reclamation. | \$46.2 million | \$19.6 million | \$22.8 million | \$37.1 million | \$68.5 million | \$157.3 million |
| Percentage of Reclamation Costs Attainable within Bond Amount | na | 42% | 100% | 86% | 53% | 29% | 12% |
| Long-Term Water Collection and Treatment Costs (required net present value of trust fund) | \$12.4 million | \$11.4 million | \$11.9 million | \$11.9 million | \$11.9 million | \$11.9 million | \$11.8 million |
| Long-Term Water Management Costs Attainable with Present Trust Fund. | 56% | 61% | 58% | 58% | 58% | 58% | 58% |

| Affected Resource or Mine Feature | Existing Condition (February 2001) | <i>Alternative L1</i> , Existing DEQ Reclamation Plans (FEIS Alt. 3 and 1998 ROD) | <i>Alternative L2</i> , Optimize Earthwork within Bond Amount | <i>Alternative L3</i> , Improved Pit Drainage Drill Hole | <i>Alternative L4</i> , Remove & Backfill L85/86 Leach Pad (Preferred Alt.) | <i>Alternative L5</i> , Pit Backfill to Cover Sulfide Highwalls | <i>Alternative L6</i> , Pit Backfill to Restore Pre-mine Topography |
|---|------------------------------------|---|---|--|---|---|---|
| Alternatives Ranking from Multiple Account Analysis Scores (from Appendix A) | | | | | | | |
| Technical Working Group's Overall Evaluation | 7 | 3 | 5 | 3 | 1 | 1 | 6 |
| Technical Working Group Evaluation without Economic Indicators | 7 | 4 | 5 | 5 | 3 | 2 | 1 |
| Cost-Benefit Evaluation Ranking. (environmental benefit vs. cost) | 6 | 4 | 1 | 2 | 3 | 5 | 7 |